

AIR INTAKE SILENCER

ABSTRACT OF THE DISCLOSURE

An air intake silencer includes an air inlet pipe and at least one tuning tube in fluid communication with the air inlet pipe. A first length and second length of the air inlet pipe and the tuning tube, respectively, are selected to produce one-half wavelength cancellation of a selected frequency of engine noise. A plurality of tuning tubes located in a wrap-around relationship with one another may tune different frequencies of noise in a compact silencing unit. The air inlet pipe and tuning tube may be integrally formed into an air intake manifold that silences one or more engine air intake inlets, and the air intake silencer may be integrated into a motor cover.